

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
7 April 2005 (07.04.2005)

PCT

(10) International Publication Number
WO 2005/031081 A1

(51) International Patent Classification⁷: **E04C 3/293**

(21) International Application Number:
PCT/KR2004/001529

(22) International Filing Date: 24 June 2004 (24.06.2004)

(25) Filing Language: **Korean**

(26) Publication Language: **English**

(30) Priority Data:
10-2003-0068475 1 October 2003 (01.10.2003) KR

(71) Applicant (for all designated States except US): **B.B.M. KOREA CO., LTD. [KR/KR]; 802, Urim E-BIZ Center, 170-5, Guro-dong, Guro-gu, Seoul 152-050 (KR).**

(71) Applicant and

(72) Inventor: **LEE, KI HONG [KR/KR]; 104-1704, Singongduk Samsung Apt., Singongduk-dong 155, Mapo-gu, Seoul 121-853 (KR).**

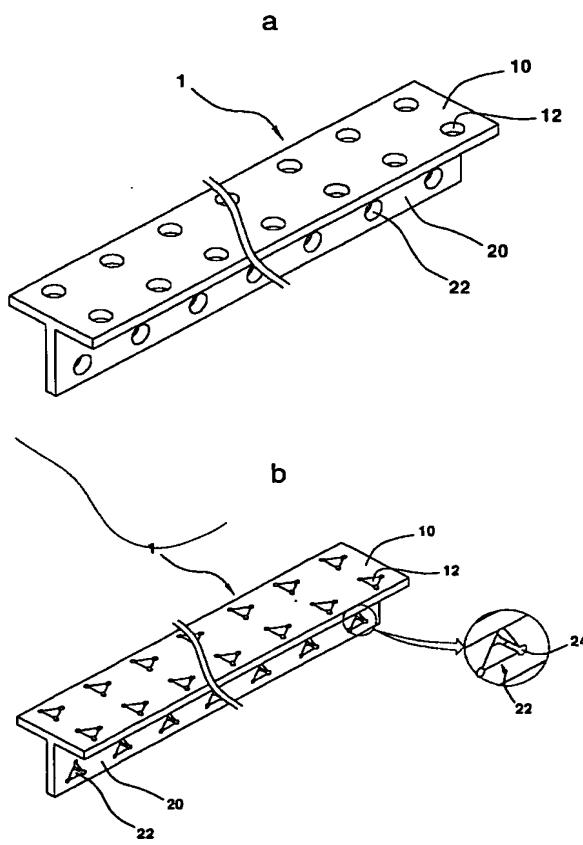
(74) Agent: **EUN JIN SOHN PATENT & LAW OFFICE; 1F., Yeoksam P-Bldg., 824-17 Yeoksam-Dong, Kangnam-Ku, Seoul 135-080 (KR).**

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI,

[Continued on next page]

(54) Title: SHEAR CONNECTOR USING PERFORATED AND/OR CUT OUT PLATE



(57) Abstract: The present invention relates to a shear connector having perforated and/or cut-out plates. In a T-shaped steel plate having a certain length, there are provided a plurality of through holes at a flange and a web. The flanges may be cut-out in biased method, and a plurality of through holes may be formed at the web. In the present invention, it is possible to achieve a perfect combination or a partial combination effect between a steel material and concrete. In addition, it is possible to enhance a weight resistance ability and a resistance ability with respect to transformation in such a manner that weight transfer function is provided between different materials.

WO 2005/031081 A1



SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ,
GW, ML, MR, NE, SN, TD, TG).

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

Published:

— *with international search report*